CLMPTO 08/30 /04 JW

Amend Claims 1&5,

No 2 Canceled

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended)   A   time   synchronization   system comprising:

a GPS (Global Positioning System) receiver for receiving a time signal from a Global Positioning System (GPS), and outputting a UTC (Universal Time Co-ordinated) synchronization reference pulse signal synchronizing with UTC and a UTC synchronization absolute time signal composed of a serial signal representing an absolute time; and

a time signal distributor for generating a reference time signal by synthesizing the UTC synchronization reference signal and the UTC synchronization absolute time signal, and ~~recording this~~ transmitting the reference time signal in distribution to a plurality of distributed control oriented terminal devices,

where said time signal distributor synchronizes a rising edge of the UTC synchronization reference signal with UTC, and transmits the time synchronization signal to each of said terminal devices in a fixed period.

2. (Canceled).

3. (Original)   A time synchronization system according to claim 1, wherein said terminal device includes a reference clock operating in synchronization with the rising edge of the UTC synchronization reference signal, for generating a time signal representing a time on the finer order than a minimum time unit that is processed in the UTC synchronization absolute time signal, and internal clock correction means for comparing an internal time value based on said reference clock with an external time value synchronizing with the UTC synchronization reference signal, and correcting said reference clock so that

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the time of said reference clock synchronizes with the UTC synchronization
reference signal.

4.　　[Original]　　A time synchronization system according to claim 3,
wherein said internal clock correction means includes means for changing a unit
delimiting width of the correction, corresponding to a magnitude of a time
difference.

5.　　[Currently Amended]　　A time synchronization synchronizing
system ~~according to claim 1,~~ comprising:

a GPS (Global Positioning System) receiver for receiving a time signal from
a Global Positioning System (GPS), and outputting a UTC (Universal Time
Coordinated) synchronization reference pulse signal synchronizing with UTC and
a UTC synchronization absolute time signal composed of a serial signal
representing an absolute time; and

a time signal distributor for generating a reference time signal by
synthesizing the UTC synchronization reference signal and the UTC
synchronization absolute time signal, and transmitting the reference time signal
in distribution to a plurality of distributed control oriented terminal devices,

wherein if impossible of receiving the UTC synchronization time signal
from an internal reference signal generator for generating an internal reference
signal synchronizing with the UTC synchronization reference signal, an internal
absolute time signal generator for generating an internal absolute time signal
equal to the UTC synchronization absolute time signal and the GPS receiver,
said signal synthesizing unit of said time signal distributor generates an internal
time signal by synthesizing the internal reference signal and the internal absolute
time signal, and transmits this internal time signal as a substitute for the
reference time signal in distribution to said respective terminal devices.

6.　　[Original]　　A time synchronizing system according to claim 5,
wherein said time signal distributor, if impossible of receiving the time signal
from said GPS receiver, synthesizes the internal time signal so that the internal
reference signal and the internal absolute time signal are not overlapped in time.

7.　　[Original]　　A time synchronizing system according to claim 1,
wherein each of said terminal devices includes an internal clock and, if unable to
receive the reference time signal from said time signal distributor, continues a
time signal process by use of said internal clock.